

**U.S. Consumer Product Safety Commission
LOG OF MEETING**

**SUBJECT: National Association of State Fire Marshals (NASFM) Annual
Conference**

DATE OF MEETING: July 11-14, 2002

LOG ENTRY SOURCE: William H. King, Jr., ES *W.H.K.*

DATE OF LOG ENTRY: July 16, 2002

LOCATION: East Elmhurst, NY

CPSC ATTENDEE(S): William H. King, Jr., ES

NON-CPSC ATTENDEE(S):

Don Bliss, NASFM

Lloyd Franklin, Arkansas State Police

Steven Spivak, University of Maryland

John Garcia, Underwriters Laboratories Inc.

Howard Hopper, Underwriters Laboratories Inc.

Neil Bibby, Government of Victoria, Australia

Hank Fellner, National Safe Kids Campaign

David Edenburn, Albermarle Corporation

Mark Larson, Idaho State Fire Marshal

John Dean, Maine State Fire Marshal

William Grosshandler, National Institute of Standards and Technology

John Watts, Fire Safety Institute

Tracy Boatwright, Indiana State Fire Marshal

Vincent Bella, Louisiana State Fire Marshal

Wayne Powell, U.S. Fire Administration

Frank McGarry, NASFM

Walter Smittle, NASFM

CPSC 6 (b)(7) Cleared

**X No Mfrs/Private Labels or
Products Identified**

7-17-02
AB

Carole Milazzo, NASFM
Margaret Siminon, SP Swedish National Testing & Research Institute
George Miller, NASFM
J. William Degnan, New Hampshire Deputy State Fire Marshal
Tom Brace, Minnesota State Fire Marshal
Peter Sparber, Sparber and Associates, Inc.
James Hoebel, consultant
Gary Ter Haar, Albermarle Corporation
Gordon Damant, Inter-City Testing & Consulting Corporation
Joseph Callan, Fire Department New York
Charles Dickinson, U.S. Fire Administration
Hank Roux, consultant
Amal Tamim, Grace Construction Products
and other attendees at the NASFM meeting.

SUMMARY OF MEETING: Mr. King attended the NASFM Annual Conference. On July 13, 2002, Mr. King provided an update of CPSC activities related to arc fault circuit interrupters. Attached is a copy of the material covered by Mr. King.

Arc-Fault Circuit Interrupters

Activities Involving NASFM, CPSC and USFA/FEMA
July 13, 2002

Outline

- History of AFCIs
- AFCIs and the *National Electrical Code*
- AFCI code acceptance by states and local jurisdictions
- NASFM, CPSC, USFA/FEMA joint efforts (USFA/FEMA funds CPSC work on home wiring fire hazards through FY2002; also included in FY 2003 budget)

AFCI History

- CPSC-sponsored research contract in 1995 studied ways to reduce home wiring fire risk with new technology
- Arc-Fault Circuit-Interrupter (AFCI) technology identified
- First production AFCI devices appeared in 1999
- NEC requirement for AFCI supported by CPSC staff and adopted in the 1999 edition, with a 2002 effective date.

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National Electrical Code

- 2002 edition: AFCIs required for branch circuits providing power to bedroom outlets
- 2005 edition: Deadline for proposals is Nov 1, 2002
- CPSC staff submitting AFCI proposal for existing homes that undergo electrical service replacement

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AFCI Acceptance – A state by state battle

- NAHB's state adoption report:
 - AFCIs out: 9 states
 - AFCIs in: 17 states
 - Undecided: 5 states
 - Partial in/out: 7 states
 - No state code: 11 states
- Fire marshals and building code officials networking
- CPSC staff's proactive steps: presentations before agencies, conferences, symposiums

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Governors' Mansions

- AFCIs provided to North Dakota
- Interest indicated by New Hampshire, Virginia and North Carolina
- Program runs through August 2002
- Can provide sub-panel that accepts AFCI devices along with the AFCIs themselves if the panel(s) in the mansion do not accept available types of AFCIs

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Current CPSC Activities with Home Builders

- Met on several occasions with NAHB staff
- Discussed AFCIs with builders at NAHB at June 2002 meeting
- Providing sample AFCIs and technical information to the NAHB Research Center
- NAHB attempting to thwart AFCI code enforcement

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Major Factors Causing Wiring Fires

- Aging, environmental stress
- Improper wiring practices
- Appliance/equipment load exceeds system design capability

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Strategies for Improvement

- Three basic strategies are necessary to improve wire system safety:
 - Alter the perception of wire systems
 - Increase collaboration between industry, academia, and the government
 - Promote improved wire system technology

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Specific Recommendations

- **Promote AFCI code enforcement**
- **Participate in NASFM – CPSC/USFA effort to install AFCIs in governors' mansions**

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